

Reply Under 37 C.F.R. § 1.116  
Expedited Procedure  
Technology Center 2600

Application No.: 10/583,721  
Art Unit: 2624

**REMARKS**

Reconsideration of the pending application is respectfully requested on the basis of the following particulars.

1. **Objection to claim 1**

Reconsideration and removal of the objection to claim 1 is respectfully requested. Upon a careful review of line five of claim 1, the applicants cannot determine where the word “and” is repeated twice such that objection to the claim is necessary.

Line five of claim 1 in part recites “checking the bank notes with comparative data stored by the bank note processing machine and derived from authentic bank notes and known forgeries; and” where the first instance of the word “and” relates back to the comparative data which is stored and which is also derived. The second use of the word “and” transitions to the next step of the process recited in claim 1.

Therefore, it is respectfully submitted that there is no improper repetition of the word “and” in claim 1.

Accordingly, removal of this objection is respectfully requested.

2. **Rejection of claims 1-3 and 5-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. publication no. 2003/0132281 (*Jones et al.*) in view of “Signature Verification: Increasing Performance by a Multi-Stage System” (*Sansone et al.*)**

Reconsideration of this rejection is respectfully requested on the basis that the rejection fails to establish a *prima facie* case of obviousness with respect to claims 1 and 6. The remaining claims depend from either claim 1 or 6, and are therefore patentable as containing all of the recited steps or elements of claims 1 or 6, as well as for their respective recited features.

In observing claims 1 and 6, it first must be understood that these claims both require two different types of comparative data to determine whether or not certain bank notes are forgeries. Specifically, both claims specify that the additional comparative data relates to new types of forgeries which are not recognized based on the comparative data derived from authentic bank notes and known forgeries.

While the Office action indicates on page 2 that the phrase “after the comparative data was established” is not recited in claims 1 and 6, it is respectfully submitted that this phrase is exactly encompassed by the recitation in claims 1 and 6 that the “additional comparative data for new types of forgeries, *which are not recognized based on the comparative data derived from authentic bank notes and known forgeries*” (emphasis added). In other words, the new types of forgeries cannot be recognized using only the comparative data derived from authentic bank notes and known forgeries, and hence, the additional comparative data for new types of forgeries is necessary to detect counterfeit bills based upon such new types of forgeries.

The additional comparative data for new types of forgeries cannot be derived from the comparative data derived from authentic bank notes and known forgeries, since the new forgeries *are not recognized* based upon the comparative data derived from authentic bank notes and known forgeries. Thus, the additional comparative data for new types of forgeries must be after developed once the new types of forgeries (which are not recognized based on the comparative data derived from authentic bank notes and known forgeries) turn up, *after the comparative data was established*.

Turning to the *Jones* publication, which is relied upon in the Office action as teaching the comparative data and additional comparative data recited in claims 1 and 6, it is respectfully submitted that the *Jones* publication does not teach the use of comparative data and additional comparative data of the type required by claims 1 and 6.

The *Jones* publication only teaches providing a set of comparative data which determines forgeries. There is no disclosure of additional comparative data used in combination with comparative data stored in the document processing machine.

In reference to Fig. 15 depicting a general description of the operation of the document processing system of the *Jones* publication, it is described in paragraph [0129] that certain counterfeit tests or comparative data include measuring light emitted from the bill, testing for watermarks, holograms, magnetics, and security threads, and testing image quality (all of which are known from existing genuine documents and existing forgeries). Also, stored serial numbers associated with *known* counterfeit bills may be used as such comparative data in the document processing system of the *Jones* publication (paragraphs [0054], [0059], [0129], [0135], [0139], [0166], [0168], [0171], [0173]). Other metrics that can be used include signatory information, such as the Secretary of Treasury, the Federal Reserve bank number, or other information that exists from *known* genuine documents (paragraphs [0113], [0128]).

While the *Jones* publication does disclose updating a database with serial numbers associated with bills determined to be counterfeit (paragraphs [0093], [0142], [0143], [0148], [0182]-[0187]), these serial numbers are associated with bills that are determined to be counterfeit using the existing *known* comparative data, and thus, are only associated with forgeries or counterfeit documents that are recognized based upon the known comparative data derived from authentic documents and known forgeries, and cannot be considered to be additional comparative data for new types of forgeries, as is required by pending claims 1 and 6.

In other words, according to the *Jones* publication, the bank notes must first be identified as being counterfeit (using the existing comparative data) before any serial numbers are extracted and stored by the document processing system. It follows that if a counterfeit bank note is processed by the document processing system of the *Jones* publication, but the counterfeit bank note of a new type of forgery does not

satisfy any of the stored counterfeit tests and is therefore not identified as being counterfeit and is judged as being authentic instead, the serial numbers of the counterfeit bank note will not and cannot be extracted and used in future processing of other bank notes.

Put another way, the extraction and storage of serial numbers according to the *Jones* publication of counterfeit bank notes is dependent on at least one bank note first being determined to be counterfeit by satisfying one of the stored, and thus old, counterfeit tests.

The system according to the *Jones* publication is therefore akin to the types of systems discussed in the Background of the pending application wherein new forgeries are not recognized and are thus erroneously judged as an authentic bank note (specification at [0002]-[0004]). In other words, the system according to the *Jones* publication is simply incapable of recognizing new types of forgeries.

Contrary to the embodiments described by the *Jones* publication the method of pending claim 1 and the bank note processing machine of pending claim 6 require using both comparative data and additional comparative data of new forgeries not included in the comparative data in order to account for new types of forgeries that may have arisen after the comparative data was established.

As for the *Sansone* publication, this reference was correctly not relied upon in the rejection to teach the comparative data and the additional comparative data required by claims 1 and 6. Instead, the *Sansone* publication only describes a multi-stage process which recognizes signatures only. There is no teaching in the *Sansone* publication that would suggest to a person having ordinary skill in the art, in view of the teachings of the *Jones* publication, to provide the comparative data and the additional comparative data as required in pending claims 1 and 6.

In view of these of these observations, it is submitted that the proposed combination of the *Jones* and *Sansone* publications fails to disclose all of the features

required by pending claims 1 and 6. Accordingly, a *prima facie* case of obviousness cannot be established with respect to pending claims 1 and 6, and withdrawal of this rejection is respectfully requested.

As mentioned above, applicants submit that independent claims 1 and 6 are patentable and therefore, claims 2, 3, 5, and 7, which depend from claims 1 or 6 respectively, are also considered to be patentable as containing all of the steps or elements of claims 1 or 6, as well as for their respective recited features.

Further, with respect to claim 5, the Office action identifies the extracted serial numbers associated with documents determined to be counterfeit of the *Jones* publication as satisfying the requirement of claim 5 that the additional comparative data for new types of forgeries are derived and produced from the new type of forgery after the first occurrence of the new type of forgery. However, as discussed above in detail, the extracted serial numbers of the *Jones* publication relate only to *known* counterfeit or forged documents, and not to *new* types of forgeries.

Accordingly, a *prima facie* case of obviousness cannot be established with respect to claim 5, and withdrawal of this rejection is respectfully requested.

3. Rejection of claim 4 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent application publication 2003/0132281 (*Jones et al.*) and in view of EP 1255232 (*Pernot*)

Reconsideration of this rejection is respectfully requested on the basis that the *Pernot* publication fails to provide for the deficiencies of the *Jones* publication discussed above with respect to claim 1, from which claim 4 depends.

The *Pernot* publication is relied upon in the Office action as processing bank notes independent of their orientation. However, it is respectfully submitted that there is no discussion in the *Pernot* publication with regard to checking bank notes on comparative data and additional comparative data, as is required by pending claim 1.

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Accordingly, a *prima facie* case of obviousness cannot be established with respect to claim 1 by the proposed combination of the *Jones* and *Pernot* publications.

Claim 4 depends from claim 1, and is therefore patentable over the proposed combination of *Jones* and *Pernot* publications at least due to its dependency from claim 1 and its individually recited features.

Therefore, withdrawal of this rejection is respectfully requested.

4. Conclusion

In view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

Please charge any additional fees required or credit any overpayments in connection with this paper to Deposit Account No. 02-0200.

If any issues remain that may be resolved by a telephone or facsimile communication with the applicants' attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

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